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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,311	04/20/2004	Nobuyuki Moriyama	042348	2563

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EXAMINER

SELF, SHELLEY M

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/827,311

Applicant(s)

MORIYAMA ET AL.

Examiner

Shelley Self

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on September 8, 2006 has been considered but is ineffective place the application in condition for allowance and an action on the merits follows.

### ***Specification***

The amendment to the specification filed September 8, 2006 has been approved and entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 4, the claim fails to positively recite any mechanical cooperative relationships between the elements and instead lists the elements. For example, are the rotating axles, rotation angle detector, beam reflection scanners, contact-swinging detection members, swing angle detectors and computation mechanism operatively connected? How? Further, the term, "predetermined preliminary axis..." (line 3) renders the claim vague, as it is not clear what is meant by "predetermined" and *axis* of what? A log? A support surface? Additionally, there is no positive recitation of any structure, necessary to carry out the functional

recitation, of “...rotating axles being adapted such that they can be brought closer to and away from each other...” i.e., how is this accomplished? What are the rotating axles operatively connected to? Lines 7-8 and 11 are confusing, as the terms, “desired positions”, “appropriate intervals” and “desired sections” are relative and therefore not clear, i.e. appropriate to what? How is appropriate determined? The recitation, “each member” (line 12) does not have clear antecedent basis within the claim. What does “each member” refer to? Examiner suggests, -- said contact-swing detection members comprising...--

Examiner notes the elements are defined in relation to the log, and an axis location, however the claim is silent to any structure upon which the log rests, i.e. base, frame and/or support. Examiner further, notes, “a...preliminary axis location” does not recite any structure. What supports the rotating axles?

With regard to claim 6, the claim states, “the beam reflection scanner is...disposed at one position near a center...of the log”, however claim 5, from which claim 6 directly depends positively recites the “beam reflection scanners disposed at...two positions near either end...of the log”, if the scanners are at either end of the log, how can they be further positioned at the center of the log? Examiner suggests, clear recitation to an additional reflection scanner if it is an additional scanner that is located at the center portion of the log as opposed to the reflection scanners located at the end portions of the log. Clarification is required.

All of the claims should be reviewed for clarity, definiteness and clear, positive recitation of mechanical interrelationships between the elements.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4-7 as best as can be understood are rejected under 35 U.S.C. 102(b) as being anticipated by Mutsuura et al. (5,582,224). Mutsuura discloses an apparatus for centering a log comprising a pair of rotating axles (col. 1, lines 41-43; col. 14, lines 10-11) disposed on either end face of a log (1) that is supplied to predetermined preliminary axis location, said rotating axles being adapted such that they can be brought closer to and away from each other (col. 1, lines 41-43) with at least one of the axles being rotated: a rotation angle detector (56; col. 1, lines 43-46; col. 9, lines 28)); beam reflection scanners (L1, L2; col. 8, lines 38-43) disposed at a plurality of desired positions along the axis of the log and near the periphery of the log such that a detection direction is oriented toward the axis of the axles; contact swinging detection members (59, 61) disposed in a plurality of sections along the axis of the log (fig. 15, 19, 24), each member comprising a base portion pivotally supported by a support axle positioned near the periphery of the log (58, 61A, 61) and a tip portion to which a detection element (59; fig. 16) is attached such that the detection elements are arranged along the axis of the log (fig. 15, 19, 24) without any gaps therebetween and are adapted to be in contact with the periphery of the log (col. 9, lines 31-35); a plurality of swing angle detectors (62A); and a centering computation mechanism (col. 14, lines 26-33; col. 15, lines 1-24) for calculating optimum yield axis based on

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a detection signal supplied from the rotation angle detectors and contour data supplied from the contact swinging detection members (col. 1, lines 55-65).

As to the beam reflection scanners, Examiner notes the beam reflection scanners are not positively recited with any mechanical cooperation or interrelation with any other structure, thus because the upper and lower detectors (31B, K, L1, L2) use a beam, i.e., photoelectric light emitters (42) and receivers (43) so as to detect a surface of the log, the detectors (L1, L2) are inherently beam reflection scanners

With regard to claim 5 as best as can be understood, Mutsuura discloses wherein the beam reflection scanners are disposed at least two positions near either end portion of the log. Examiner notes an end portion to be an upper end and lower end.

With regard to claim 6 as best as can be understood, Mutsuura discloses wherein the beam reflection scanner is additionally disposed at one position near a center portion of the log (col. 2, lines 1-7, lines 32-36).

With regard to claim 7 as best as can be understood, Mutsuura discloses detection members as planar or cylindrical (fig. 15).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 as best as can be understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuura (5,582,224).

With regard to claim 8, Mutsuura does not disclose detection members as cylindrical. The specific shape of the detection members is one of mechanical expedients, and does not in itself warrant patentability. Furthermore, the disclosure fails to positively recite any criticality to the use of a cylindrical detection element over that of another shape and in fact states clear use and functionality with a planar shaped detection element. Accordingly in the absence of any clearly recited criticality to the shape of the detection element as being cylindrical such selection would result from routine experimentation and engineering practices and requires only routine skill in the art and would be obvious to the skilled artisan.

#### ***Response to Arguments***

Applicant's arguments filed September 8, 2006 have been carefully considered but they are not persuasive. Applicant's remarks are drawn to the failure of prior art, Mutsuura to disclose or fairly suggest "*beam reflection scanner*" as required by claim 4 and *that independent claim 4 requires both "contact swinging detection members" and "beam reflection scanners"*.

Applicant argues that Mutsuura teaches using non-contact detecting elements instead of contact type detecting elements. This argument is not found persuasive, because as noted above, Mutsuura discloses the use of various detectors, i.e. beam reflection scanners that utilize photoelectric light emitters and receivers along ends of the log so as to determine presence and diameter of a log. Further, Mutsuura teaches the use of rotation angle detectors (56) and contact swinging detectors (59, 61). Examiner concedes that Mutsuura teaches the contact swinging

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detectors (59, 61) to be either contact detectors or non-contact detectors (col. 17, lines 31-33), however because Mutsuura explicitly teaches use of either a contact or non-contact detector for the swinging detectors and non-contact detectors (L1, L2) as light emitters/receivers and rotation angle detectors all of which create a signal that is analyzed by a computer to determine optimum yield axis and centering of a log for position and optimum peeling, the claimed invention does not patentably distinguish over the prior art of record.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is 571-272-4524. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SSelf   
November 20, 2006